

IN THE CLAIMS:

Please amend claims 1, 2, 8 and 9, and cancel claims 3 and 11 without prejudice or disclaimer, as follows:

1. (Currently Amended) A magnetic recording medium comprising:

a substrate;

an underlayer formed over said substrate, said underlayer including Cr and Ti;

a magnetic recording layer formed directly on said underlayer, having a first magnetic layer, a second magnetic layer and, a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer, wherein

said first magnetic layer consisting of Co, Pt, and Cr and formed directly on said underlayer that includes Cr and Ti,

said non-magnetic intermediate layer contains at least one element selected from the group consisting of Ru, Ir, and Rh,

said second magnetic layer contains Co as a main component,

said first magnetic layer and said second magnetic layer are magnetized in the antiparallel direction in the absence of an applied magnetic field, and the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

2. (Currently Amended) A magnetic recording medium including a substrate and a magnetic recording layer formed thereon with an underlayer interposed between them, wherein said magnetic recording layer comprises:

a first magnetic layer containing Pt formed directly on said underlayer,

a second magnetic layer, and

a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer,

said first magnetic layer and said second magnetic layer are magnetized in the antiparallel direction in the absence of an applied magnetic field, the amount of Pt

contained in said first magnetic layer is no less than 3 at % and no more than 9 at %, wherein

said magnetic recording layer is formed directly on said underlayer, wherein said underlayer includes Cr and Ti.

3. (Canceled)
4. (Original) A magnetic recording medium according to claim 3, wherein said underlayer additionally contains B.
5. (Original) A magnetic recording medium according to claim 1, wherein said non-magnetic intermediate layer has a thickness of 0.3 to 0.9 nm.
6. (Original) A magnetic recording medium according to claim 3 further comprising; a metal film having an amorphous structure or microcrystalline structure, which is formed between said substrate and said underlayer containing Cr and Ti.
7. (Original) A magnetic recording medium according to claim 6, wherein; the metal film composed of an alloy containing Ta and Ni.
8. (Currently Amended) A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium which is comprised of:

a substrate;

an underlayer formed over said substrate, said underlayer including Cr and Ti; and

a magnetic recording layer formed directly on said underlayer, having a first magnetic layer, a second magnetic layer and, a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer, wherein

said first magnetic layer consisting of Co, Pt, and Cr and being formed directly on said underlayer that includes Cr and Ti,

said non-magnetic intermediate layer contains at least one element selected from the group consisting of Ru, Ir, and Rh,

said second magnetic layer contains Co as a main component,

said first magnetic layer and said second magnetic layer are magnetized in the antiparallel direction in the absence of an applied magnetic field, and the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

9. (Currently Amended) A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is comprised of:

a substrate and a magnetic recording layer formed thereon with an underlayer interposed between them, wherein said magnetic recording layer comprises:

a first magnetic layer containing Pt formed directly on said underlayer,

a second magnetic layer, and

a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer,

said first magnetic layer and said second magnetic layer are magnetized in the antiparallel direction in the absence of an applied magnetic field, the amount of Pt contained in said first magnetic layer is no less than 3 at % and no more than 9 at %, wherein

said magnetic recording layer is formed directly on said underlayer, wherein said underlayer includes Cr and Ti.

10. (Previously Presented) A magnetic recording medium according to claim 1, further comprising a protective layer formed over said magnetic recording layer and directly on said second magnetic layer.
11. (Canceled)